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10/840,042	05/06/2004	Mark Edwin Forry	9630	7766

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EXAMINER

CORDRAY, DENNIS R

ART UNIT	PAPER NUMBER
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1731

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/840,042	Applicant(s) FORRY ET AL.	
	Examiner Dennis Cordray	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7-16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. The rejection of Claims 19-20 and 25-26 under 35 U.S.C. 102(e) over Schmidt et al has been withdrawn due to Applicant's cancellation of the rejected claims.

Applicant's amendments and arguments, filed 8 June, 2007, have overcome the rejection of Claims 1, 5 and 11 under 35 U.S.C. 102(b) or 35 U.S.C. 103(a) over Koons; the rejection of Claims 1, 5, 11, 14, 19-20 and 23-24 under 35 U.S.C. 102(b) or 35 U.S.C. 103(a) over Kershaw et al; and the rejection of Claims 1, 5-9, 11, 13-14 and 17 under 35 U.S.C. 102(b) over Chen et al (5990377). The rejections have been withdrawn.

However, upon further consideration, new grounds of rejection are made as detailed below.

Applicant argues that Chen et al does not disclose product that is convolutedly wound to form a roll, such as a roll of paper towels. However, it is a typical procedure in the manufacture of tissue products to wind the web onto a parent roll (would over and over upon itself, thus is convolutedly wound) for further processing (see Lin et al, 5944273, col 1, lines 4-10). The paper roll is later converted to a final product, such as a rolls of bath tissue or rolls of paper towels, which are also convolutedly wound (col 1, lines 11-16). Lin et al discloses a process for winding uncreped tissue onto rolls (Abs; col 7, line 65 to col 10, line 2). While Chen et al does not explicitly disclose a sanitary tissue product in roll form, such a product step would at least have been obvious to one

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of ordinary skill in the art at the time of the invention. The common availability of rolled tissue and paper towel products has been well known in the art for decades.

Kershaw et al teaches sanitary tissue products in roll form (col 8, lines 40-50).

Regarding the glass transition temperature of the latex, Swoboda et al teaches that the glass transition for a variety of commercially available latexes, some of which are listed on p 8 of the instant Specification, is in the claimed range. It would have been obvious to one of ordinary skill in the art to use a known commercially available latex.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 7-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (5990377) in view of Lin et al (5944273) and evidenced by Swoboda et al (6740373).

Claims 1, 5 and 7: Chen et al discloses a patterned fibrous structure or basesheet, which can be used in an absorbent article such as feminine pads, diapers,

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towels, wipes, or other sanitary tissue product (Abs, col 2, line 64 to col 3, line 6). The structure comprises a latex either as a hydrophobic material or as an adhesive (col 5, lines 39-41; col 34, line 48 to col 35, line 24, especially col 35, lines 3-21; col 37, line 53 to col 8, line 26, especially col 38, lines 5-26). The latex can be an ethylene-vinyl acetate copolymer, an acrylic polymer or a styrene-butadiene copolymer. Specific commercial products recited include Airflex™ and Nacrylic™, which are recited as suitable latexes on p 8 of the instant Disclosure. The latexes have glass transition temperatures (T_g) in the claimed range (see Swoboda et al, 6740373, col 27, Table 5, where a T_g from -7 to 29 °C is listed for several latex formulations of the above described compositions).

Chen et al discloses that the structure comprises two surfaces, either of both of which can be patterned by deforming the basesheet (Figs 1-3; col 26, lines 34-41). The structure can be wet laid or air laid by standard processes (col 28, lines 55-64; col 29, lines 52-63).

Chen et al discloses the deformation height of an uncalendered and uncreped sheet of greater than 0.5 mm, or 500 μm, with a most preferable range of 0.4 to 1.2 mm, or 400 to 1200 μm (col 31, lines 13-26). Calendering and creping are optional treatments (col 36, lines 30-38) and, in a preferred embodiment, are not used at all (col 29, lines 52-54). Thus base sheets having a deformation height of at least 1200 μm are disclosed in preferred embodiments. With no upper limit to the broader disclosure of greater than 500 μm, the deformation height is only limited by the physical ability of the tissue to stretch without tearing.

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Chen et al does not disclose that the sheets are rolled.

Lin et al discloses a process for winding uncreped tissue onto rolls (Abs; col 7, line 65 to col 10, line 2). Lin et al teaches that it is a typical procedure in the manufacture of tissue products to wind the web onto a parent roll and later convert the parent roll to a final product, such as rolls of bath tissue or rolls of embossed paper towels (col 1, lines 4-16).

The art of Chen et al, Lin et al and the instant invention is analogous as pertaining to making patterned tissue paper. It would have been obvious at the time of the invention to make a sanitary tissue product in roll form, such as rolls of bath tissue or rolls of paper towels, from the tissue of Chen et al in view of Lin et al as a typical end product.

Claims 8 and 9: Chen et al discloses that the basesheet has substantially uniform density for good absorption (col 27, lines 38-43). In some embodiments, the structure comprises an underlying fibrous structure that has a pattern of densified regions imparted by embossing or other techniques, thus the structure can have regions of high and low density (col 27, line 54 to col 28, line 3).

Claim 10: Chen et al does not disclose the latex being substantially present in the high density regions of the structure. Chen et al discloses multiple-ply structures wherein the layers can be joined by adhesives (col 36, line 64 to col 37, line 11).

Figures 2-3 show such structures. It would have been obvious to one of ordinary skill in the art to use the latex already disclosed as an adhesive (col 5, lines 39-41; col 38, lines 1-6) to join the layers together. Where the lower areas of the basesheet joins either

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another layer or the lower areas of a second inverted basesheet, an area of higher density is created because there is no air pocket, thus the latex adhesive would be concentrated more in the high density areas.

Claim 11: In some embodiments, the basesheet has protrusions or deformations extending above and below the plane of the sheet. Thus, both sides are deformed, the depth of deformation for each side being within the claimed range, as discussed above for Claim 1 (col 31, lines 13-26).

Claims 12 and 15: Chen et al does not disclose the HFS absorbency or the wet burst strength of the tissue. The structure of Chen et al is substantially identical to the claimed structure. It would have been obvious to one of ordinary skill in the art at the time of the invention to obtain the claimed properties of HFS absorbency and wet burst strength because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

Claims 13 and 14: Chen et al discloses the stretch in both cross direction and machine direction of greater than 10% (col 31, lines 30-39). Figure 16 shows the density and basis weight of sheets made. Dividing the basis weight by the density gives the caliper of the sheets (with appropriate unit conversion) from 23.5 to 25 mils.

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Claims 16 and 18: Chen et al does not disclose the caliper of rolled tissue.

Figures 1-3 and 5-6 show structures of Chan et al that cannot nest. Since the patterned sheets have void spaces beneath the raised portions, it would have been obvious to one of ordinary skill in the art at the time of the invention to obtain an effective caliper of rolled patterned sheets greater than rolled unpatterned sheets having no void spaces.

3. Claims 1, 5, 11 and 14 are rejected under 35 U.S.C. 103(a) as unpatentable over Kershaw et al (5409572) in view of Swoboda et al (6740373).

Kershaw et al discloses an embossed tissue of high softness having one or both surfaces embossed (Abs; col 1, lines 65-68). The depth of the embossing can be up to 0.06 inch or over (1524 μ m) (col 2, lines 18-24). The sheets have a caliper from 0.02 to 0.1 inch (20 to 100 mils) (col 8, lines 4-27). Kershaw et al discloses that samples of the tissues were made by foam forming and by water forming (col 9, lines 4-10). Kershaw et al further defines water forming to include forming on paper machines using water as the carrier in the forming loop in the usual commercial forming configurations, such as twin-wire, Fourdrinier and other well known configurations (col 2, lines 41-49). While wet-laid sheets are not the preferred method of making the tissues of Kershaw et al, a reference is not limited to its preferred embodiment, but must be evaluated for all of its teachings, including its teachings of non-preferred embodiments. *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979). Thus, wet-laid webs are disclosed. Latex can be included in the sheet as a commonly known and used additive in papermaking

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processes (col 5, lines 12-20). Kershaw et al discloses a sanitary tissue product in roll form (col 8, lines 40-50).

Kershaw et al does not disclose the glass transition temperature of the latex.

The disclosure of Swoboda et al is used as above.

The art Kershaw et al, Swoboda et al and the instant invention is analogous as pertaining to making tissue paper comprising latex. It would have been obvious to one of ordinary skill in the art to use a commercially available latex as disclosed by Swoboda et al in the tissue product of Kershaw et al as an easily obtained and functionally equivalent option.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kershaw et al.

Claim 1 is a product-by-process claim. The product of Kershaw et al appears to be the same as or similar to the claimed product, a patterned tissue product comprising latex, although produced by a different process. The burden therefore shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). "In the event any differences can be shown for the product of the product-by-process claim 1 as opposed to the product taught by the reference Kershaw et al, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results: see also In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)"

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

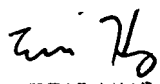
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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